

SEQUENCE LISTING

<110> Ghayur, Tarig et al.

<120> ANTIBODIES THAT BIND HUMAN INTERLEUKIN-18 AND METHODS  
OF MAKING AND USING

<130> BBI-149

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<150> 60/181,608

<151> 2000-02-10

<160> 71

<170> PatentIn Ver. 2.1

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Asp Gln Val Leu Phe Ile Asp Gln Gly Asn Arg Pro Leu Phe Glu Asp  
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SEQUENCE LISTING

Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile  
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Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile  
50 55 60

Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys Glu Asn Lys Ile  
65 70 75 80

Ile Ser Phe Lys Glu Met Asn Pro Pro Asp Asn Ile Lys Asp Thr Lys  
85 90 95

Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly His Asp Asn Lys  
100 105 110

Met Gln Phe Glu Ser Ser Ser Tyr Glu Gly Tyr Phe Leu Ala Cys Glu  
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Gly Gln Asp Met Glu Gln Gln Val Val Phe Ser Met Ser Phe Val Gln  
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Gly Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu  
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Lys Asn Leu Tyr Leu Ser Cys Val Leu Lys Asp Asp Lys Pro Thr Leu  
65 70 75 80

Gln Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Met Glu  
85 90 95

Lys Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe  
100 105 110

Glu Ser Ala Gln Phe Pro Asn Trp Tyr Ile Ser Thr Ser Gln Ala Glu  
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Asn Val Asn Leu Glu Glu Lys Ile Asp Val Val Pro Ile Glu Pro His  
35 40 45

Ala Leu Phe Leu Gly Ile His Gly Gly Lys Met Cys Leu Ser Cys Val  
50 55 60

Lys Ser Gly Asp Glu Thr Arg Leu Gln Leu Glu Ala Val Asn Ile Thr  
65 70 75 80

Asp Leu Ser Glu Asn Arg Lys Gln Asp Lys Arg Phe Ala Phe Ile Arg  
85 90 95

Ser Asp Ser Gly Pro Thr Thr Ser Phe Glu Ser Ala Ala Cys Pro Gly  
100 105 110

Trp Phe Leu Cys Thr Ala Met Glu Ala Asp Gln Pro Val Ser Leu Thr  
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35 40 45

Pro Arg Ser Ser Ser Arg Ile Ala Leu His Asp Cys Val Leu Glu Phe  
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Trp Pro Val Glu Leu Asn Asp Thr Gly Ser Tyr Phe Phe Gln Met Lys  
65 70 75 80

Asn Tyr Thr Gln Lys Trp Lys Leu Asn Val Ile Arg Arg Asn Lys His

85                    90                    95  
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Lys Phe Phe Gln Ile Thr Cys Glu Asn Ser Tyr Tyr Gln Thr Leu Val  
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Asn Ser Thr Ser Leu Tyr Lys Asn Cys Lys Lys Leu Leu Leu Glu Asn  
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Tyr Tyr Ser Cys Val His Phe Leu His His Asn Gly Lys Leu Phe Asn  
165                    170                    175  
Ile Thr Lys Thr Phe Asn Ile Thr Ile Val Glu Asp Arg Ser Asn Ile  
180                    185                    190  
Val Pro Val Leu Leu Gly Pro Lys Leu Asn His Val Ala Val Glu Leu  
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Gly Lys Asn Val Arg Leu Asn Cys Ser Ala Leu Leu Asn Glu Glu Asp  
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Val Ile Tyr Trp Met Phe Gly Glu Glu Asn Gly Ser Asp Pro Asn Ile  
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His Glu Glu Lys Glu Met Arg Ile Met Thr Pro Glu Gly Lys Trp His  
245                    250                    255  
Ala Ser Lys Val Leu Arg Ile Glu Asn Ile Gly Glu Ser Asn Leu Asn  
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Ile Thr Trp Tyr Lys Asp Asp Ser Lys Thr Pro Val Ser Thr Glu Gln  
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Ala Ser Arg Ile His Gln His Lys Glu Lys Leu Trp Phe Val Pro Ala  
50                    55                    60  
Lys Val Glu Asp Ser Gly His Tyr Tyr Cys Val Val Arg Asn Ser Ser

65

70

75

80

Tyr Cys Leu Arg Ile Lys Ile Ser Ala Lys Phe Val Glu Asn Glu Pro  
85 90 95

Asn Leu Cys Tyr Asn Ala Gln Ala Ile Phe Lys Gln Lys Leu Pro Val  
100 105 110

Ala Gly Asp Gly Gly Leu Val Cys Pro Tyr Met Glu Phe Phe Lys Asn  
115 120 125

Glu Asn Asn Glu Leu Pro Lys Leu Gln Trp Tyr Lys Asp Cys Lys Pro  
130 135 140

Leu Leu Leu Asp Asn Ile His Phe Ser Gly Val Lys Asp Arg Leu Ile  
145 150 155 160

Val Met Asn Val Ala Glu Lys His Arg Gly Asn Tyr Thr Cys His Ala  
165 170 175

Ser Tyr Thr Tyr Leu Gly Lys Gln Tyr Pro Ile Thr Arg Val Ile Glu  
180 185 190

Phe Ile Thr Leu Glu Glu Asn Lys Pro Thr Arg Pro Val Ile Val Ser  
195 200 205

Pro Ala Asn Glu Thr Met Glu Val Asp Leu Gly Ser Gln Ile Gln Leu  
210 215 220

Ile Cys Asn Val Thr Gly Gln Leu Ser Asp Ile Ala Tyr Trp Lys Trp  
225 230 235 240

Asn Gly Ser Val Ile Asp Glu Asp Asp Pro Val Leu Gly Glu Asp Tyr  
245 250 255

Tyr Ser Val Glu Asn Pro Ala Asn Lys Arg Arg Ser Thr Leu Ile Thr  
260 265 270

Val Leu Asn Ile Ser Glu Ile Glu Ser Arg Phe Tyr Lys His Pro Phe  
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Leu Ile Tyr Pro Val Thr  
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Ser Met Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Gly Tyr  
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Tyr Ile His Trp Val Arg Gln Ala His Gly Gln Gly Phe Glu Trp Ile  
35 40 45

Gly Arg Leu Asn Pro Thr Thr Gly Asp Ala Asn Phe Ala Glu Lys Phe  
50 55 60

Gln Gly Arg Val Ala Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
65 70 75 80

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85 90 95

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Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser  
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Gly Ser Gly Asn Thr Gly Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu  
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25

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Lys Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr  
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Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn  
50 55 60

Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp  
65 70 75 80

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35 40 45

Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser  
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln  
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu  
85 90 95

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35 40 45

Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn  
50 55 60

Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp  
65 70 75 80

Thr Ala Val Tyr Tyr Cys Ala Arg Asp Asp Asp Tyr Asp Phe Asp  
85 90 95

Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly  
100 105 110

Ser Gly Gly Gly Ser Gly Gly Ser Ala Gln Ser Val Leu  
115 120 125

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile  
130 135 140

Ser Cys Ser Gly Ser Ser Asn Ile Gly Ile Asn Ala Val Asn Trp  
145 150 155 160

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn  
165 170 175

Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser  
180 185 190

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu  
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20 25 30

Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile  
35 40 45

Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile  
50 55 60

Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys Glu Asn Lys Ile  
65 70 75 80

Ile Ser Phe Lys Glu Met Asn Pro Pro Asp Asn Ile Lys Asp Thr Lys  
85 90 95

Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly His Asp Asn Lys  
100 105 110

Met Gln Phe Glu Ser Ser Ser Tyr Glu Gly Tyr Phe Leu Ala Cys Glu  
115 120 125

Lys Glu Arg Asp Leu Phe Lys Leu Ile Leu Lys Lys Glu Asp Glu Leu  
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Ser Met Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Gly Tyr  
20 25 30

tat atc cac tgg gtg cga cag gcc cct gga cag gga ttc gag tgg ata 144  
Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Phe Glu Trp Ile  
35 40 45

gga cgg ctc aac ccc acc act ggt gac gca aat ttt gca gaa aag ttt 192  
Gly Arg Leu Asn Pro Thr Thr Gly Asp Ala Asn Phe Ala Glu Lys Phe  
50 55 60

cag ggc agg gtc gcc ctc acc aga gac acg tcc atc agc aca gcc tat 240  
Gln Gly Arg Val Ala Leu Thr Arg Asp Thr Ile Ser Thr Ala Tyr  
65 70 75 80

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Leu Gln Leu Asp Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

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35 40 45

Gly Arg Leu Asn Pro Thr Thr Gly Asp Ala Asn Phe Ala Glu Lys Phe  
50 55 60

Gln Gly Arg Val Ala Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
65 70 75 80

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Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln  
1 5 10 15

aca gtc agg atc aca tgc caa gga gac agc ctc aga cac ttt tat cca 96  
Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg His Phe Tyr Pro  
20 25 30

aac tgg tac cag cag aag cca gga cag gcc cct gta ctt gtc atc tat 144  
Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr  
35 40 45

ggg aaa aac aat cgg ccc tca ggg atc cca gac cga ttc tct ggc tcc 192  
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser  
50 55 60

ggc tca gga aac aca ggt tcc ttg acc atc act ggg gcc cag gcg gaa 240  
Gly Ser Gly Asn Thr Gly Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu  
65 70 75 80

gat gag gct gac tat tac tgt ggc tcc cgg gac agc agt ggt atc cat 288  
Asp Glu Ala Asp Tyr Tyr Cys Gly Ser Arg Asp Ser Ser Gly Ile His  
85 90 95

gtg gta ttc ggc gga ggg acc aag gtc acc gtc cta ggt 327  
Val Val Phe Gly Gly Thr Lys Val Thr Val Leu Gly  
100 105

<210> 65  
<211> 109  
<212> PRT

<213> Homo sapiens

<400> 65

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln  
1 5 10 15

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg His Phe Tyr Pro  
20 25 30

Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr  
35 40 45

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser  
50 55 60

Gly Ser Gly Asn Thr Gly Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu  
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gly Ser Arg Asp Ser Ser Gly Ile His  
85 90 95

Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly  
100 105

<210> 66

<211> 354

<212> DNA

<213> Homo sapiens

<220>

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<400> 66

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Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
1 5 10 15

tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttt agc agc tat  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
20 25 30

gcc atg agc tgg gtc cgc cag gct cca ggg aag ggg ctg gag tgg gtc  
Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45

tca gct att agt agt ggt agt ggt agt agc aca tac tac gca gac tcc gtg  
Ser Ala Ile Ser Gly Ser Gly Ser Thr Tyr Tyr Ala Asp Ser Val  
50 55 60

aag ggc cgg ttc acc atc tcc aga gac aat tcc aag aac acg ctg tat  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80

ctg caa atg aac agc ctg aga gcc gag gac acg gcc gtg tat tac tgt  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

gcg aga gat gac gat gac tac gac ttt gac tac tgg ggc cgg ggg aca  
Ala Arg Asp Asp Asp Tyr Asp Phe Asp Tyr Trp Gly Arg Gly Thr  
336

100

105

110

atg gtc acc gtc tcg agt  
Met Val Thr Val Ser Ser  
115

354

<210> 67  
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<213> Homo sapiens

<400> 67  
Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45

Ser Ala Ile Ser Gly Ser Gly Ser Thr Tyr Tyr Ala Asp Ser Val  
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

Ala Arg Asp Asp Asp Tyr Asp Phe Asp Tyr Trp Gly Arg Gly Thr  
100 105 110

Met Val Thr Val Ser Ser  
115

<210> 68  
<211> 334  
<212> DNA  
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<220>  
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<400> 68  
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Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Ala Pro Gly Gln  
1 5 10 15

agg gtc acc atc tct tgt tct gga agc agc tcc aac atc gga att aat 96  
Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Asn Ile Gly Ile Asn  
20 25 30

gct gta aac tgg tac cag cag ctc cca gga acg gcc ccc aaa ctc ctc 144  
Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu  
35 40 45

atc tat ggt aat gat cag cgg ccc tca ggg gtc cct gac cga ttc tct 192  
Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser

50

55

60

ggc tcc aag tct ggc acc tca gcc tcc ctg gcc atc agt ggg ctc cag 240  
Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln  
65 70 75 80

tct gag gat gag gct gat tat aac tgt gca gca tgg gat gac agc ctg 288  
Ser Glu Asp Glu Ala Asp Tyr Asn Cys Ala Ala Trp Asp Asp Ser Leu  
85 90 95

agt ggt ccg gtg ttc ggc gga ggg acc aag ctg acc gtc cta ggt g 334  
Ser Gly Pro Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly  
100 105 110

<210> 69

<211> 111

<212> PRT

<213> Homo sapiens

<400> 69

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Ala Pro Gly Gln  
1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ile Asn  
20 25 30

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu  
35 40 45

Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser  
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln  
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Asn Cys Ala Ala Trp Asp Asp Ser Leu  
85 90 95

Ser Gly Pro Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly  
100 105 110

<210> 70

<211> 66

<212> PRT

<213> Homo sapiens

<400> 70

Tyr Phe Gly Lys Leu Glu Ser Lys Leu Ser Val Ile Arg Asn Leu Asn  
1 5 10 15

Asp Gln Val Leu Phe Ile Asp Gln Gly Asn Arg Pro Leu Phe Glu Asp  
20 25 30

Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile  
35 40 45

Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile  
50 55 60

Ser Val  
65

<210> 71  
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<212> PRT  
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<400> 71  
Phe Leu Ala Cys Glu Lys Glu Arg Asp Leu Phe Lys Leu Ile Leu Lys  
1               5                   10                   15

Lys Glu Asp Glu Leu Gly Asp Arg Ser Ile Met Phe Thr Val Gln Asn  
20               25                           30

Glu Asp

TOSOEGE, MUSICA, ET CETERA